

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

1-38. (Canceled)

39. (Previously presented) An apparatus comprising:
a light source configured to produce a coherent beam;
a beam splitter configured to split the coherent beam into
an object beam, and
a reference beam;
a material holder configured to hold a holographic recording material;
an object beam unit configured to
display a rendered image,
condition the object beam with the rendered image, and
cause the object beam to interfere with the reference beam at a location for an
elemental hologram of a holographic stereogram on the holographic
recording material;
a voxel-control lens located in a path of the object beam and positioned at a distance from
the location for the elemental hologram, wherein the distance is based at least in
part on
a focal length of the voxel-control lens, and
a size of the elemental hologram; and
a computer programmed to control a delivery of the rendered image to the object beam
unit.

40. (Previously presented) The apparatus of claim 39, wherein:

the object beam unit comprises a spatial light modulator (SLM) configured to display the rendered image; and

the voxel-control lens has a focal length about equal to a distance between the voxel-control lens and the SLM.

41. (Previously presented) The apparatus of claim 39, wherein:

the object beam unit comprises a SLM configured to display the rendered image; and

the voxel-control lens has a focal length about equal to a distance between the voxel-control lens and a projected image of the SLM.

42-56. (Canceled)

57. (Previously presented) A method comprising:

selecting a location for an elemental hologram of a holographic stereogram in a holographic recording medium;

generating a coherent light beam;

splitting the beam into

an object beam, and

a reference beam;

rendering an image;

conditioning the object beam with the rendered image, wherein the conditioning comprises

positioning a voxel-control lens at a distance from the selected location for the elemental hologram, wherein the positioning is based at least in part on

a focal length of the voxel-control lens, and

a size of the elemental hologram, and

passing the object beam through the voxel-control lens; and
interfering the conditioned object beam with the reference beam at the selected location
for the elemental hologram.

58-64. (Canceled)

65. (Previously presented) The method of claim 57, wherein the voxel-control lens is
positioned at a location selected to:

change the size of at least one voxel of the holographic stereogram; and
make the rendered image, from a viewpoint of the selected location for the elemental
hologram, appear at a greater apparent distance relative to the holographic
recording material.

66. (Previously presented) The method of claim 57, wherein:

the conditioning comprises displaying the rendered image on a spatial light modulator
(SLM); and

the focal length of the voxel-control lens is about equal to a distance between the voxel-
control lens and the SLM.

67. (Previously presented) The method of claim 57, wherein:

the conditioning comprises displaying the rendered image on a spatial light modulator
(SLM); and

the focal length of the voxel-control lens is about equal to a distance between the voxel-
control lens and a projected image of the SLM.

68. (Currently amended) A system comprising:

means for selecting a location for an elemental hologram of a holographic stereogram in a holographic recording medium;

means for generating a coherent light beam;

means for splitting the beam into

an object beam, and

a reference beam;

means for rendering an image;

means for conditioning the object beam with the rendered image, comprising

an object beam unit, wherein

the object beam unit is configured to position means for positioning a voxel-control lens at a distance from [[the]] **a** selected location for [[the]] **an** elemental hologram **of a holographic stereogram,** [[wherein]]

the elemental hologram is in a holographic recording medium,

the **distance positioning** is based at least in part on

a focal length of the voxel-control lens, and

a size of the elemental hologram, and

means for passing the object beam through the voxel-control lens; and

means for interfering the conditioned object beam with the reference beam at the selected location for the elemental hologram.

69. (Currently amended) The system of claim 68, wherein the object beam unit means for positioning is configured to position the voxel-control lens at a location selected to:

change the size of at least one voxel of the holographic stereogram; and
make the rendered image, from a viewpoint of the selected location for the elemental hologram, appear at a greater apparent distance relative to the holographic recording material.

70. (Previously presented) The system of claim 68, wherein:

the means for conditioning the object beam with the rendered image comprises
means for displaying the rendered image on a spatial light modulator (SLM); and
the focal length of the voxel-control lens is about equal to a distance between the voxel-control lens and the SLM.

71. (Previously presented) The system of claim 68, wherein:

the means for conditioning the object beam with the rendered image comprises
means for displaying the rendered image on a spatial light modulator (SLM); and
the focal length of the voxel-control lens is about equal to a distance between the voxel-control lens and a projected image of the SLM.